

REMARKS

By this reply, no claims have been amended, cancelled, or added. Accordingly, claims 1, 2, 4-6, 8, 11, and 13 are currently pending in the application, of which claims 1 and 5 are independent claims.

In view of the following Remarks, Applicants respectfully request reconsideration and timely withdrawal of the pending rejections for the reasons discussed below.

Rejections Under 35 U.S.C. § 112, first paragraph

Claims 1, 2, 4-6, 8, 11, and 13 stand rejected under 35 U.S.C. § 112, first paragraph as failing to comply with the written description requirement for allegedly containing new matter. Applicants respectfully traverse this rejection for at least the following reasons.

The Examiner states that the amendment to independent claims 1 and 5, which recite that the image display device is surrounded by an inner sealant having no plugged openings therein, appears to introduce new matter. However, support for this amendment is contained within the specification and drawings.

For example, FIG. 3A and FIG. 3B both show an inner sealant 32 that does not include a plugged opening therein. Further support is provided in the specification on page 7, lines 18-23, in which it is stated that "a second sealing member 32 is formed such as to partition each of the image display means 20" and also that "the image display means 20 are individually sealed up". Therefore, it can be seen that the specification teaches that the inner sealant completely surrounds and partitions the image display means so as to seal them up and therefore does not contain any openings nor any plugged openings.

Accordingly, Applicants respectfully request withdrawal of the 35 U.S.C. § 112, first paragraph rejection of claims 1, 2, 4-6, 8, 11, and 13.

Rejections Under 35 U.S.C. § 103

Claims 1, 2, 4-6, 8, 11, and 13 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over U. S. Patent No. 6,391,137 issued to Matsushima ("Matsushima") in view of U. S. Patent No. 5,766,493 issued to Shin ("Shin"), U.S. Patent No. 6,908,638 issued to Ueda, et al ("Ueda"), and U.S. Patent No. 5,361,152 issued to Harada et al ("Harada").

Applicants respectfully traverse this rejection for at least the following reasons.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *MPEP* 2143.

Furthermore, "In order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992).

The Examiner has failed to make a *prima facie* case of obviousness with regard to claims 1 and 5 because the Examiner has not provided adequate motivation to combine the references.

The Examiner has stated that it would have been obvious to one of ordinary skill in the art to modify the method taught by Matsushima to additionally attach an unetchable protection film to all of each lateral side of the combined upper and lower substrates and that the motivation for doing so would have been to prevent foreign materials or strong acid from entering between the first and second substrates during etching.

However, this rationale would not motivate one of ordinary skill in the art to add an additional unetchable protection film to the lateral sides of the substrates because the substrates in Matsushima already include a periphery sealing material that prevents foreign materials and strong acid from entering further than the periphery between the first and second substrates during etching (column 1, lines 50-63, FIG. 12, no. 4). Therefore, there is no need to add the sealant taught by Shin. Furthermore, the addition of the extra sealant would increase production costs and thus would actually be disadvantageous.

The Examiner has stated that it would have been obvious to one of ordinary skill in the art to modify the method taught by Matsushima and Shin to form the organic EL display devices taught by Ueda and that the motivation would have been to obtain thin display devices with stable luminescence characteristics (Ueda, column 2, lines 10-15).

However, this rationale would not motivate one of ordinary skill in the art to modify the method taught by Matsushima, because Ueda already teaches a method of making a thin (column 4, lines 8-11) display device with stable luminescence characteristics (column 2, lines 10-15). Therefore, because Ueda already teaches a thin display device with stable luminescence characteristics, one of ordinary skill in the art would not be motivated to add time and expense to combine different references and process steps to achieve what Ueda already teaches. The only reason to combine references to achieve a method, other than the method taught by Ueda, that provides a thin display device with stable luminescence characteristics is hindsight.

Furthermore, Matsushima and Ueda are not in the same field of endeavor, and are not reasonably pertinent to the particular problem with which each inventor was concerned.

Matsushima's field of endeavor does not include organic electroluminescent elements because Matsushima does not teach the use of an organic electroluminescent material. Ueda's field of endeavor is limited to an organic electroluminescent element (abstract). Ueda's field of

endeavor does not include liquid crystal displays and therefore does not overlap with Matsushima's field of endeavor. Furthermore, Matsushima's particular problem is attempting to provide a method for producing a display device by which a substrate is thinned sufficiently (abstract) using liquid acid (column 2, lines 19-20). Ueda's particular problem is to provide an organic electroluminescent element having stable luminescent characteristics with a low luminescence starting voltage and without non-luminescing black spots in the the luminescing surface (abstract). Ueda does not teach thinning or etching a substrate, but only teaches dry etching an electrode (column 10, lines 23-39) with plasma (column 3, lines 9-10). Therefore, it is improper to combine Matsushima with Ueda.

The Examiner has stated that it would be obvious to combine Harada with Matsushima, Shin, and Ueda so that the image display devices are each surrounded by an inner sealant having no plugged openings therein because an organic EL display device would be coated on the substrate and therefore no opening would be necessary for the injection of liquid crystals, and also because an omission of an element and its function is obvious if the function of the element is not desired.

However, even if Matsushima, Shin, and Ueda were properly combinable, and the openings were not needed to inject liquid crystal, the openings in the inner sealants would still be beneficial because the openings are used "so that the barometric pressure between the original glass substrates would not be increased" (Matsushima, column 2, lines 1-9). This clearly shows that the openings are beneficial for a use other than injecting liquid crystal and Matsushima thus teaches away from removing the openings as the Examiner has suggested doing. Therefore, the device taught by Matsushima must necessarily contain plugged holes because the openings are a beneficial part of the process and the holes must be plugged to maintain the integrity of the device.

The Examiner has failed to make a *prima facie* case of obviousness with regard to claim 5 because Matsushima in view of Shin, Ueda, and Harada fail to teach or suggest all of the claim limitations.

Matsushima in view of Shin, Ueda, and Harada at least fail to teach or suggest that the combining comprises attaching an unetchable protection film to all of each lateral side of the combined upper and lower substrates.

The Examiner admits that Matsushima does not expressly teach that the combining further comprises attaching an unetchable protection film to all of each lateral side of the combined upper and lower substrates, but states that Shin does teach an unetchable protection film additionally attached to all of each lateral side of the upper and lower substrates.

However, Shin only teaches an acid-resistant sealant (column 4, lines 10-14) that covers only part of a lateral side of the upper and lower substrates (FIG. 3C, no. 15). It can be seen from FIG. 3C that the sealant (no. 15) taught by Shin only covers part of the lateral side of the upper substrate (20) and the lower substrate (10) and does not cover all of each lateral side as required by claim 5.

Furthermore, Shin describes the purpose of the sealant is to "prevent foreign materials or strong acid from entering TFT device and color filter". Therefore, the sealant taught by Shin does not need to cover all of the lateral side of the upper substrate and lower substrate, but only needs to cover enough to block acid or other materials from entering the TFT device, as shown in FIG. 3C. It would be unobvious to expand the sealant of Shin to cover all of the lateral side of the upper substrate and lower substrate because it is not necessary to make the sealant larger to block acid or other materials and to do so would increase the production costs of the device.

Accordingly, Applicants respectfully request withdrawal of the 35 U.S.C. § 103(a) rejection of claims 1, 2, 4-6, 8, 11, and 13. Applicants respectfully submit that independent claims 1 and 5 and all the claims that depend therefrom are allowable.


CONCLUSION

Applicants believe that a full and complete response has been made to the pending Office Action and respectfully submits that all of the stated objections and grounds for rejection have been overcome or rendered moot. Accordingly, Applicants respectfully submit that all pending claims are allowable and that the application is in condition for allowance.

Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact the Applicants' undersigned representative at the number below to expedite prosecution.

Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,


Hae-Chan Park
Reg. No. 50,114

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CUSTOMER NUMBER: 58027

H.C. Park & Associates, PLC
8500 Leesburg Pike
Suite 7500
Vienna, VA 22182
Telephone No. (703) 288-5105
Facsimile No. (703) 288-5139
HCP:DTB:kbs